

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants:	Kelly Reasoner, et al.	Examiner:	Tan X. Dinh
Serial No.:	10/688,753	Group Art Unit:	2627
Filed:	October 17, 2003	Docket No.:	10012665-4
Title:	Data Cartridge Detection Systems and Methods		

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**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

Mail Stop Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed August 17, 2007 and Notice of Appeal filed on November 19, 2007.

**AUTHORIZATION TO DEBIT ACCOUNT**

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

**I. REAL PARTY IN INTEREST**

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

## **II. RELATED APPEALS AND INTERFERENCES**

There are no known related appeals, judicial proceedings, or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

### **III. STATUS OF CLAIMS**

Claims 1 – 9 and 21 – 24 are pending in the application and stand finally rejected. Claims 10 – 20 and 25 were canceled. The rejection of claims 1 – 9 and 21 – 24 is appealed.

#### **IV. STATUS OF AMENDMENTS**

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R.

§ 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

### **Claim 1**

A method for detecting a data cartridge in a cartridge engaging assembly, comprising (see paragraph [0022]):

emitting a signal from a signal emitter on the cartridge engaging assembly into a chamber formed within the cartridge engaging assembly (As shown in Figs. 3-5, a signal 50 is emitted into the cartridge engaging assembly 30, for example, using the signal emitter 45; see paragraph [0022].);

detecting at least a portion of said emitted signal when said emitted signal is reflected from the data cartridge (As shown in Figs. 3-5, the signal 50 is reflected from the data cartridge 15 and is detected, for example, using the signal detector 40; see paragraph [0022].);

generating output to indicate whether said data cartridge is present in said cartridge engaging assembly based on said emitted signal that is reflected from the data cartridge (As shown in Figs. 3-5, once the signal 50 has been detected, output to indicate whether the data cartridge 15 is present in the cartridge engaging assembly 30 is generated (e.g., by the signal detector 40) based on the detected signal 50; see paragraph [0022].); and

identifying a type of said data cartridge present in said cartridge engaging assembly based on said emitted signal that is reflected from the data cartridge (As discussed in paragraph [0020]: It may also be necessary or desirable to know the characteristics (e.g., the color, type, etc.) of the data cartridge 15 that is present within the

cartridge engaging assembly 30. As discussed in paragraph [0043]: The signal detector 40 may also detect and/or measure one or more characteristics of the data cartridge 15 (e.g., whether it has a smooth, rough, shiny, or dull surface) based on the detected signal 50).

#### Claim 5

The method of claim 1, further comprising deciphering a color of said data cartridge based on said emitted signal that is reflected from the data cartridge (As discussed in paragraph [0044]: A color-deciphering component (e.g., suitable wavelength detection and measurement hardware and the related program code, where necessary) may be provided to determine the color of the data cartridge 15 that is present within the cartridge engaging assembly 30).

#### Claim 6

A data cartridge detection system (Fig. 1 shows an apparatus 10 for detecting a data cartridge 15), comprising:

a cartridge engaging assembly for receiving a data cartridge therein (As shown in Figs. 1-3, a media storage system 20 includes a cartridge engaging assembly 30 that can be moved among the cartridge-receiving devices to receive a data cartridge 15; see paragraphs [0019 – 0020]);

a signal emitter mounted to said cartridge engaging assembly, said signal emitter producing a signal that is reflected by the presence of the data cartridge within said cartridge engaging assembly (As shown in Figs. 3-5, a signal 50 is emitted into the cartridge engaging assembly 30, for example, using the signal emitter 45; see paragraph [0022]. As shown in Figs. 3-5, the signal 50 is reflected from the data cartridge 15 and is detected, for example, using the signal detector 40; see paragraph [0022].); and

a signal detector operatively associated with said cartridge engaging assembly, said signal detector being responsive to the reflected signal for (1) indicating that the data cartridge is present in said cartridge engaging assembly and (2) identifying a type of the data cartridge present in said cartridge engaging assembly based on a surface characteristic of the data cartridge (As shown in Figs. 3-5, the signal 50 is reflected from

the data cartridge 15 and is detected, for example, using the signal detector 40; see paragraph [0022]. As shown in Figs. 3-5, once the signal 50 has been detected, output to indicate whether the data cartridge 15 is present in the cartridge engaging assembly 30 is generated (e.g., by the signal detector 40) based on the detected signal 50; see paragraph [0022]. As discussed in paragraph [0043]: The signal detector 40 may also detect and/or measure one or more characteristics of the data cartridge 15 (e.g., whether it has a smooth, rough, shiny, or dull surface) based on the detected signal 50).

#### Claim 7

A data cartridge detection system (Fig. 1 shows an apparatus 10 for detecting a data cartridge 15), comprising:

means for receiving a data cartridge therein (Example means is cartridge engaging assembly 30: As shown in Figs. 1-3, a media storage system 20 includes a cartridge engaging assembly 30 that can be moved among the cartridge-receiving devices to receive a data cartridge 15; see paragraphs [0019 – 0020]);

means for emitting a signal positioned on said means for receiving (Example means is signal emitter 45: As shown in Figs. 3-5, a signal 50 is emitted into the cartridge engaging assembly 30, for example, using the signal emitter 45; see paragraph [0022]);  
and

means for detecting said signal when said signal is reflected from the data cartridge while said data cartridge is located inside said means for receiving, said means for detecting mounted to said means for receiving, wherein said means for detecting generates output to (1) indicate whether said data cartridge is present in said means for receiving based on said detected signal and (2) interpret a bar code on said data cartridge while said data cartridge is located inside said means for receiving (Example means is signal detector 40: As shown in Figs. 3-5, the signal 50 is reflected from the data cartridge 15 and is detected, for example, using the signal detector 40; see paragraph [0022]. As shown in Figs. 3-5, once the signal 50 has been detected, output to indicate whether the data cartridge 15 is present in the cartridge engaging assembly 30 is generated (e.g., by the signal detector 40) based on the detected signal 50; see paragraph [0022]. As discussed in paragraph [0043]: The signal detector 40 may also detect and/or



measure one or more characteristics of the data cartridge 15 (e.g., whether it has a smooth, rough, shiny, or dull surface) based on the detected signal 50).

Claim 24

The data cartridge detection system of claim 6, wherein the signal detector is adapted to detect a color of the data cartridge (As discussed in paragraph [0044]: A color-deciphering component (e.g., suitable wavelength detection and measurement hardware and the related program code, where necessary) may be provided to determine the color of the data cartridge 15 that is present within the cartridge engaging assembly 30).

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 1 – 9 and 21 – 24 are rejected under 35 USC § 102(e) as being anticipated by USPN 6,618,348 (Coffin).

## **VII. ARGUMENT**

The rejection of claims 1 – 9 and 21 – 24 is improper, and Applicants respectfully request reversal of these rejections.

The claims do not stand or fall together. Instead, Applicants present separate arguments for various claims. Each of these arguments is separately argued below and presented with separate headings and sub-heading as required by 37 C.F.R. § 41.37(c)(1)(vii). Specifically, the arguments are divided into four different claim groups: group 1 (claims 1-4 and 21), group 2 (claims 5 and 24), group 3 (claims 6 and 22-23), and group 4 (claims 7-9).

### **Overview of Claims and Primary Reference (Coffin)**

As a precursor to the arguments, Applicants provide an overview of the claims and the primary reference (Coffin). This overview will assist in determining the scope and content of the prior art in order to evaluate the rejections.

Coffin is generally directed to autochangers or data storage systems for handling and storing data cartridges, such as optical disks or magnetic tapes. In autochangers, an inventory must often be performed to determine which cartridges are located in the autochanger. The cartridges are located in multiple magazines in the autochanger. To perform such an inventory, Coffin teaches a cartridge engaging assembly (also known as a “picker”) that has a bar code reader mounted to the cartridge engaging assembly. This bar code reader reads bar code labels on the cartridges while the cartridges are still in the storage magazines (see col. 5, lines 30-33). Thus, the cartridge engaging assembly reads the cartridges without being required to first pick a cartridge and move it into the cartridge engaging assembly. The invention in Coffin substantially decreases the time required to identify all of the data cartridges contained in the data storage system (see col. 5, lines 36-39).

Applicants’ claims recite methods and systems for detecting a data cartridge while the data cartridge is located in the cartridge engaging assembly. A signal is emitted into the cartridge engaging assembly and reflected from the cartridge. The reflected signal provides two pieces of information: First, reflected signal indicates whether a cartridge is

present inside the cartridge engaging assembly. Second, the reflected signal identifies a “type” of cartridge that is present in the data cartridge assembly.

**Claim Rejections: 35 USC § 102(e)**

Claims 1 – 9 and 21 – 24 are rejected under 35 USC § 102(e) as being anticipated by USPN 6,618,348 (Coffin). These rejections are traversed.

The claims recite numerous recitations that are not taught in Coffin. Some examples are provided below for different claim groupings.

Sub-Heading: Claims 1-4 and 21

Claim 1 is selected for discussion for this group.

As one example, claim 1 recites “emitting a signal from a signal emitter on the cartridge engaging assembly into a chamber formed within the cartridge engaging assembly.” Coffin does not teach emitting a signal into a chamber formed within the cartridge engaging assembly. By contrast, Coffin teaches that the signal is emitted away from the chamber formed within the cartridge engaging assembly. Figures 3 – 5 in Coffin shows the illumination system 50 that emits signals away from the chamber of the cartridge engaging assembly 36.

In fact, Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines, not in the chamber of the cartridge engaging assembly:

More specifically, the cartridge engaging assembly 36 is operated so that as it moves along one of the cartridge access sides (e.g., cartridge access side 20) of the cartridge handling assembly 13, the bar code reader 10 reads the bar code labels 34 positioned on the **cartridges contained in the cartridge storage magazines 16** located adjacent the third cartridge access side 24. (Emphasis added: Column 5, lines 27-33).

Anticipation under section 102 can be found only if a single reference shows exactly what is claimed (see *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985)). For at least these reasons, independent claim 1 and its dependent claims are allowable over Coffin.

As another example, claim 1 recites “generating output to indicate whether said data cartridge is present in said cartridge engaging assembly.” Coffin does not teach generating output to indicate whether a cartridge is present in the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never detects whether a cartridge is present in the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 1 and its dependent claims are allowable over Coffin.

As yet another, claim 1 recites “identifying a type of said data cartridge present in said cartridge engaging assembly.” Coffin does not teach this element. The Office Action cites Coffin at column 1, lines 5-10. Applicants respectfully traverse.

Column 1, lines 5-10 discuss the existence of “different types of data storage systems” not identifying different types of data cartridges. In other words, Coffin discusses different storage systems, not different data cartridges.

In Coffin, the bar code reader is used to “identify each cartridge during a cartridge inventory operation” (column 5, lines 25-27). Nowhere does Coffin state that the bar code reader is used to identify a type of data cartridge.

Anticipation is established only when a single prior art reference discloses each and every element of a claimed invention united in the same way (see *RCA Corp. v.*

*Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984)). For at least these reasons, independent claim 1 and its dependent claims are allowable over Coffin.

Sub-Heading: Claims 5 and 24

Claim 5 is selected for discussion for this group.

Claim 5 recites **deciphering a color** of said data cartridge based on said emitted signal that is reflected from the data cartridge. Applicants have carefully reviewed Coffin but can find no teaching for deciphering a color of the data cartridge. **The Examiner has failed to identify a location in Coffin for teaching deciphering a color of a data cartridge.** In other words, the Examiner has not met his burden of proof in rejecting claims 5 and 24 because no citation to Coffin has been provided to reject these claims.

Sub-Heading: Claims 6 and 22-23

Claim 6 is selected for discussion for this group.

As one example, claim 6 recites “producing a signal that is reflected by the presence of the data cartridge within said cartridge engaging assembly.” Coffin does not produce a signal reflected by the presence of a data cartridge within the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never produces a signal by the presence of a data cartridge “within” the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 6 and its dependent claims are allowable over Coffin.

As another example, claim 6 recites a signal detector that indicates whether the data cartridge is present in the cartridge engaging assembly. Coffin does not detect whether a data cartridge is present in the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never produces a signal by the presence of a data cartridge “in” the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 6 and its dependent claims are allowable over Coffin.

As yet another example, claim 6 recites identifying a type of data cartridge present in the cartridge engaging assembly. Coffin does not teach this element. The Office Action cites Coffin at column 1, lines 5-10. Applicants respectfully traverse.

Column 1, lines 5-10 discuss the existence of “different types of data storage systems” not identifying different types of data cartridges. In other words, Coffin discusses different storage systems, not different data cartridges.

In Coffin, the bar code reader is used to “identify each cartridge during a cartridge inventory operation” (column 5, lines 25-27). Nowhere does Coffin state that the bar code reader is used to identify a type of data cartridge.

Anticipation is established only when a single prior art reference discloses each and every element of a claimed invention united in the same way (see *RCA Corp. v. Applied Digital Data Systems, Inc.*, 730 F.2d 1440, 1444 (Fed. Cir. 1984)). For at least these reasons, independent claim 6 and its dependent claims are allowable over Coffin.

#### Sub-Heading: Claims 7-9

Claim 7 is selected for discussion for this group.

Claim 7 recites “detecting said signal when said signal is reflected from the data cartridge while said data cartridge is located inside said means for receiving” (emphasis added). Coffin does not detect whether a data cartridge is located inside the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never produces a signal by the presence of a data cartridge “in” the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 7 and its dependent claims are allowable over Coffin.

As another example, claim 7 recites a means for detecting that generates an output to “indicate whether said data cartridge is present in said means for receiving.” Coffin does not detect whether a data cartridge is present in the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never produces a signal by the presence of a data cartridge “in” the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 7 and its dependent claims are allowable over Coffin.



As yet another example, claim 7 recites a means for detecting that generates an output to “interpret a bar code on said data cartridge while said data cartridge is located inside said means for receiving” (emphasis added). Coffin does not detect whether a data cartridge is located inside the cartridge engaging assembly. Coffin expressly teaches that the signal detects information from cartridges located outside of the chamber of the cartridge engaging assembly. Coffin reads the cartridges while they are still in the storage magazines. In Coffin, the cartridges are read while they are “positioned adjacent the cartridge access side 58 of the cartridge handling system 36” (see column 5, lines 9-11). Coffin never produces a signal by the presence of a data cartridge “in” the cartridge engaging assembly. The signal in Coffin is emitted away from and outside the cartridge engaging assembly. In Coffin, the cartridges are read while “contained in the cartridge storage magazines” (see column 10, lines 3-8).

For a prior art reference to anticipate under section 102, every element of the claimed invention must be identically shown in a single reference (see *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990)). For at least these reasons, independent claim 7 and its dependent claims are allowable over Coffin.

#### Response to Examiner’s Arguments

The Examiner repeatedly cites Coffin at column 6, lines 12-25. This section of Coffin teaches that the cartridge engaging assembly can have two bar code readers (a forward-facing reader and a rear-facing reader). These two readers enable the cartridge engaging assembly to simultaneously read two cartridges: one cartridge behind the cartridge engaging assembly and one cartridge in front of the cartridge engaging assembly.

Neither of the two readers in Coffin read a cartridge while the cartridge is located inside the cartridge engaging assembly. Again, a principle advantage of Coffin is the ability to quickly read data cartridges while the cartridges remain in the storage magazines. In other words, the cartridge engaging assembly does not have to spend time grabbing the cartridge, moving it into the cartridge engaging assembly, and then reading the cartridge. In fact, Coffin cannot read a cartridge while the cartridge is located inside

the cartridge engaging assembly because the readers emit light that is directed away from the cartridge engaging assembly.

Applicants respectfully ask the Board of Appeals to read column 6, lines 1 – 10. This section of Coffin explains that while one cartridge is located inside the cartridge engaging assembly, the reader reads another cartridge located outside the cartridge engaging assembly. The reader in Coffin is reading the cartridge located outside the chamber of the cartridge engaging assembly.

### **CONCLUSION**

In view of the above, Applicants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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### **VIII. Claims Appendix**

1. A method for detecting a data cartridge in a cartridge engaging assembly, comprising:
  - emitting a signal from a signal emitter on the cartridge engaging assembly into a chamber formed within the cartridge engaging assembly;
  - detecting at least a portion of said emitted signal when said emitted signal is reflected from the data cartridge;
  - generating output to indicate whether said data cartridge is present in said cartridge engaging assembly based on said emitted signal that is reflected from the data cartridge; and
  - identifying a type of said data cartridge present in said cartridge engaging assembly based on said emitted signal that is reflected from the data cartridge.
2. The method of claim 1, wherein emitting the signal is at least during start-up.
3. The method of claim 1, wherein emitting the signal is at least during power-up of the cartridge-engaging assembly.
4. The method of claim 1, further comprising focusing said signal for detection.
5. The method of claim 1, further comprising deciphering a color of said data cartridge based on said emitted signal that is reflected from the data cartridge.

6. A data cartridge detection system, comprising:
  - a cartridge engaging assembly for receiving a data cartridge therein;
  - a signal emitter mounted to said cartridge engaging assembly, said signal emitter producing a signal that is reflected by the presence of the data cartridge within said cartridge engaging assembly; and
  - a signal detector operatively associated with said cartridge engaging assembly, said signal detector being responsive to the reflected signal for (1) indicating that the data cartridge is present in said cartridge engaging assembly and (2) identifying a type of the data cartridge present in said cartridge engaging assembly based on a surface characteristic of the data cartridge.
7. A data cartridge detection system, comprising:
  - means for receiving a data cartridge therein;
  - means for emitting a signal positioned on said means for receiving; and
  - means for detecting said signal when said signal is reflected from the data cartridge while said data cartridge is located inside said means for receiving, said means for detecting mounted to said means for receiving, wherein said means for detecting generates output to (1) indicate whether said data cartridge is present in said means for receiving based on said detected signal and (2) interpret a bar code on said data cartridge while said data cartridge is located inside said means for receiving.
8. The system of claim 7, wherein said means for emitting comprises a light source.

9. The system of claim 7, wherein said means for detecting comprises a light detector.

10. – 20. (Canceled)

21. The method of claim 1, further comprising moving the cartridge engaging assembly between first and second positions in response to the generated output indicating that the data cartridge is present in the cartridge engaging assembly.

22. The data cartridge detection system of claim 6, wherein the cartridge engaging assembly is movable between different locations within a media storage system in response to the reflected signal.

23. The data cartridge detection system of claim 6, further comprising a computer board on the cartridge engaging assembly, the signal emitter mounted on the computer board.

24. The data cartridge detection system of claim 6, wherein the signal detector is adapted to detect a color of the data cartridge.

25. (Canceled)

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.